

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: EDS00-0441-00(047) Clinch **OFFICE:** Engineering Services
P.I. No.: 422420
SR 89/US 441 Widening and Reconstruction **DATE:** May 5, 2010

FROM: Ronald E. Wishon, State Project Review Engineer *REW*

TO: Bobby K. Hilliard, PE, State Program Delivery Engineer
Attn.: Matt Bennett

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above project was held October 19-23, 2009. Responses were received on February 9, 2010. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
A-1	Reduce the inside lane width from 12 ft to 11 ft	\$148,000	Yes	This will be done.
A-2	Eliminate median in urban section and reduce median width in rural section	\$210,000	No	The current plan consists of a four lane divided highway with a 32 ft depressed median in the rural sections and a 20 ft raised median in the urban sections. While traffic counts are fairly low, (3250 in 2007 and 5210 in 2027), this roadway has a speed design of 65 mph in the rural section and 45 mph in the urban section and 20% truck traffic.
A-3	Reduce paved shoulder width from 6.5 ft to 4 ft	\$79,000	Yes	This will be done.
A-5	Reduce various turning/auxiliary lanes as specified in the VE Study report	\$107,000	Yes	This will be done.

**EDS00-0441-00(047) Clinch
Implementation of Value Engineering Study Alternatives**

**P.I. No. 422420
Page 2**

B-3	Construct wide single bridges instead of double bridges	\$590,000	No	Since A-2 was not implemented, the implementation of B-3 would not provide any savings. Based on information provided by Bridge Design, B-3 would increase the cost of the project.
B-9	Redesign Bridge No. 1 using Typ I MOD Beams	Design Suggestion	Yes	Bridge Design concurs with this recommendation.
C-1	Reduce ROW and utilize more easement from Riverside Ave. to CR 7/3 rd Ave.	\$786,000	Yes	This will be done.
C-5	Reduce required ROW beyond construction limits	\$146,000	Yes	This will be done.
DS	Consider Roundabout at intersection of US 441/SR 94 at SR 177	Design Suggestion	Yes	The roundabout will be analyzed and considered as a possible design. At this time, it cannot be determined if it can be utilized on the project.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved:

Gerald M. Ross, PE, Chief Engineer

Date:

5/6/10

REW/LLM

Attachments

c: Ben Buchan

Paul Liles/Bill Duvall/Bill Ingalsbe

Mike Haithcock/Matt Bennett/Karyn Matthews

Joe Cowan

Ken Werho

Lisa Myers

Matt Sanders

VE Team:

Jennifer Harris-Dunham

Judy Meisner

Vo Nguyen

Charner Rodgers

Larry Smith

Ralph Volpe

Sam Woods

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE	EDS00-0441-00(047), Clinch County Widening SR89/US 441 near Fargo P. I. No. 422420	OFFICE	Jesup
		DATE	2/9/2010
FROM	Matt Bennett, Project Manager		
TO	Ronald E. Wishon, State Project Review Engineer Attn: Lisa Myers		
SUBJECT	Value Engineering Study Responses		

Reference is made to the recommendations that were contained in the Value Engineering Study Final Report dated November 12, 2009 for the above referenced project. Our responses are as follows:

Recommendations:

1. Idea RD-A1; Use 12' for outside lane and 11' for the inside lane

The original design calls for the construction of 2-12' lanes NB as well as SB.

The alternative proposes to construct a 12' outside lane, and an 11' inside lane on both NB and SB lanes throughout the project.

The total potential savings if accepted is \$148,000.

➤ VE Recommendation RD-A1 is accepted.

2. Idea RD-A2; Use a 4' flush median in rural section and no median in urban section

The current plan consists of a four lane highway divided by a 32' depressed median in the rural sections and a 20' raised median in urban section.

This recommendation reduces the overall width of the median for the length of the project.

The total potential savings if accepted is \$210,000.

➤ VE Recommendation RD-A2 is not accepted. – Traffic counts show (2007) – 3250 and (2027) – 5210 with 20 % trucks. Due to 65 mph design speed for rural section and 45 mph design speed in urban section, along with this

magnitude of truck traffic, it is recommended to maintain the 32 (Rural) and 20 (Urban) foot medians.

3. Idea RD-A3; Reduce paved shoulder widths

The current plan consists of 6.5 foot paved outside shoulder with 3.5 foot graded shoulder throughout the corridor of the project.

This recommendation reduces the width of the paved outside shoulder to 4 feet with a 6 foot graded area for the length of the project.

The total potential savings if accepted is \$79,000.

- VE Recommendation RD-A3 is accepted.

4. Idea RD-A5; Reduce turning/auxiliary lanes

The current plans provide for eyebrows and auxiliary lanes throughout the corridor.

This recommendation would reduce the number of eyebrows/auxiliary lanes, as well as, reduce continuous right turns on the project in the following locations:

- Eliminate two (2) eyebrows/auxiliary lanes at Riverside Avenue and one (1) eyebrow/auxiliary lane at 2nd Avenue.
- The continuous right turn lane proposed to be eliminated is from approximately station 179+00 to 186+50 (SB lane).
- The right turn lane proposed to be reduced is NB at Williamsburg.

These locations to be considered are shown in the VE Study Report.

The total potential savings if accepted is \$107,000.

- VE Recommendation RD-A5 is accepted.

5. Idea RD-B3; Construct two, wide, single bridges

The current plans show replacing Br's 1 and 2 with double bridges for a total of 4 bridges being constructed.

This recommendation would reduce the construction to one bridge at each location, therefore reducing bridge complete, bridge barrier, class A concrete and guardrail.

The total potential savings if accepted is \$590,000.

- VE Recommendation RD-B3 is not accepted. – Concurrence from Bridge Design rec'd on 2/9/2010. – Without accepting Idea A-2, this idea is not a cost savings at all. In fact, without narrowing the median, there is an increase in cost associated with constructing a single bridge in the amount of \$335,845.00 in additional bridge deck alone. It was also found that the cost savings in the report are also inaccurate; there would be no cost savings on guardrail, but actually a cost increase due to the narrower median and clear distances.

6. Idea RD-B9; Re-design bridge 1 using Type 1 (MOD) beams

The total potential savings if accepted is \$0.00.

- VE Recommendation RD-B9 is accepted. – Concurrence from Bridge Design rec'd on 1/28/2010.

7. Idea RD-C1; Reduce the ROW/Utilize more easements from Riverside Ave. to CR 7 / 3rd Ave

The total potential savings if accepted is \$786,000.

- VE Recommendation RD-C1 is accepted.

8. Idea RD-C5; Reduce required ROW beyond construction limits.

The total potential savings if accepted is \$146,000.

- VE Recommendation RD-C5 is accepted.

Design Considerations:

1. Idea DS-; Consider a roundabout at intersection of US 441/SR 89 @ SR 177

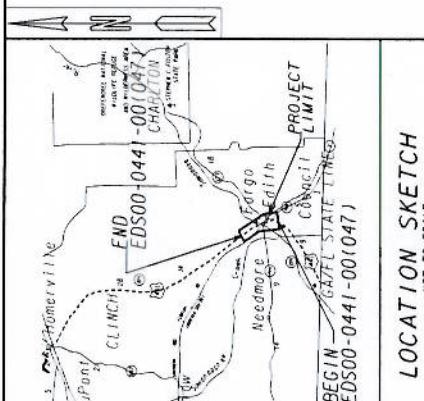
- VE Design Considerations DS is accepted for consideration. – The roundabout will be analyzed and considered as a possible design, however, will be determined at that point whether to implement or not.

If there are any further questions or if any additional information is needed, please contact the Project Manager, Matt Bennett at (912) 271-7404 or e-mail at mabennett@dot.ga.gov.

BH:MAH:JMB

c:

Lisa Myers
General File Unit, Atlanta
Jesup Files
Project Files

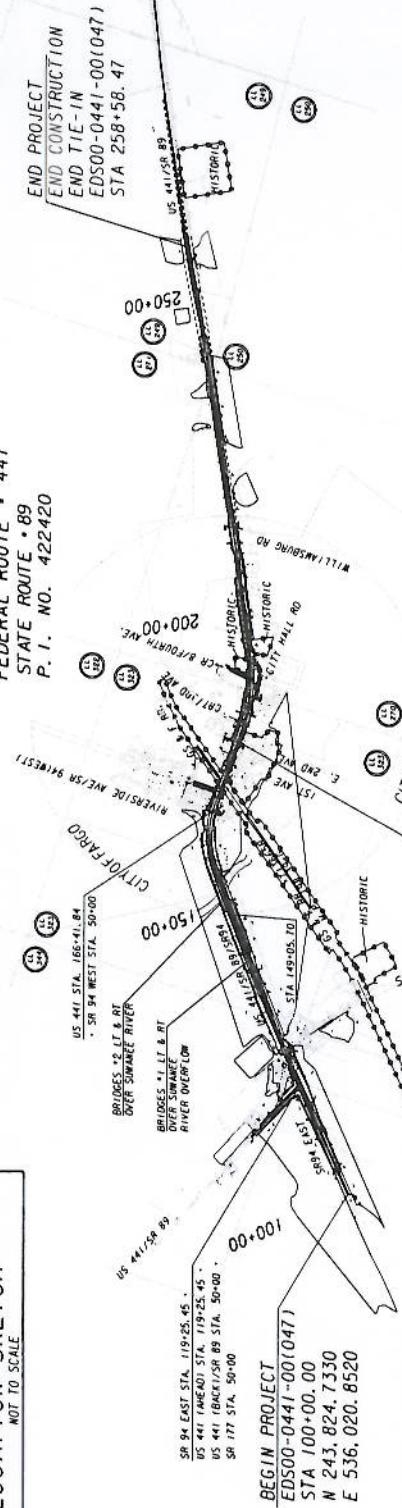


DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

PLAN AND PROFILE OF PROPOSED US 441 / SR 89 WIDENING AND RECONSTRUCTION EDS00-0441-00(047) CLINCH COUNTY NO. 065 EXEMPT

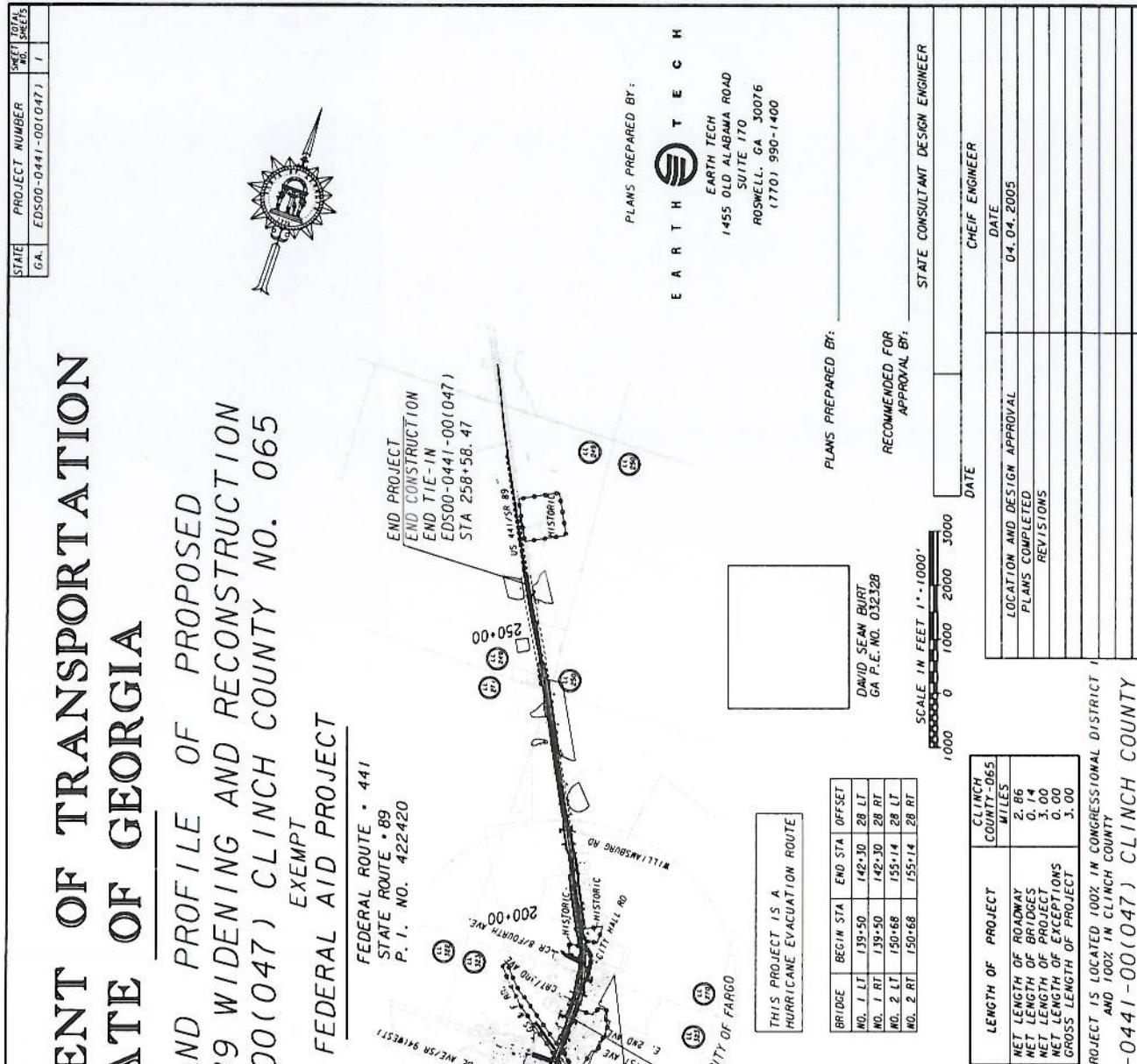
FEDERAL AID PROJECT

LOCATION SKETCH NOT TO SCALE

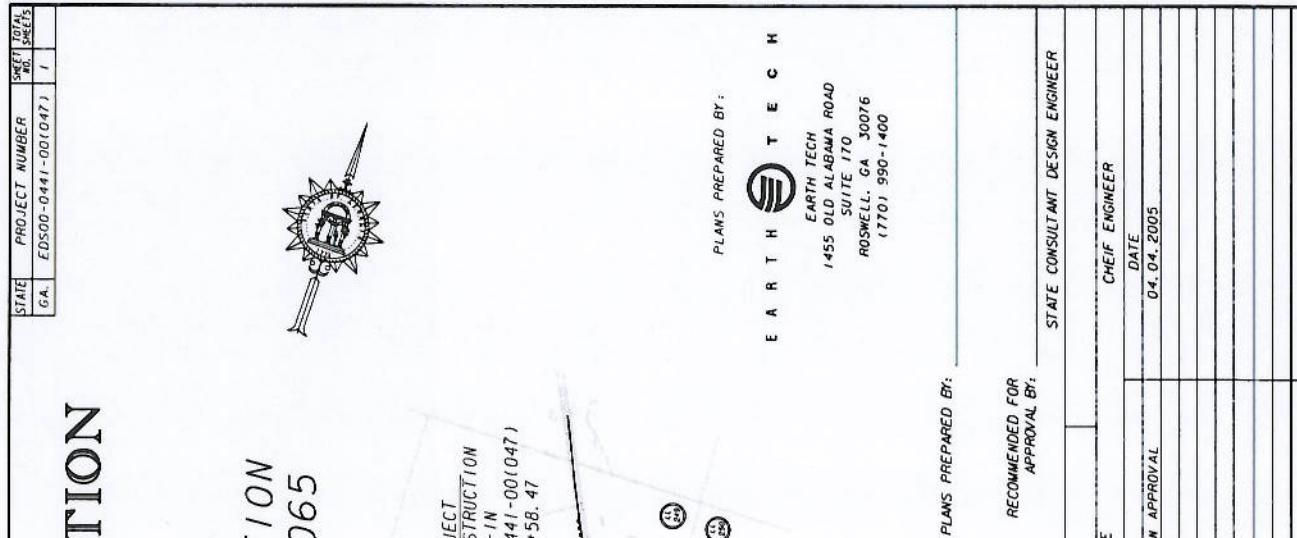


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THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THESE ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102, 04, 102, 05, AND 104, 03 OF THE SPECIFICATIONS.



THIS PROJECT IS LOCATED 100' IN CONGRESSIONAL DISTRICT 1 AND 100' IN CLINCH COUNTY
EDS00-0441-00(047) CLINCH COUNTY



PRECONSTRUCTION STATUS REPORT FOR PI:422420-

SR 89/LS 441 FM SR 94/SR 177 TO N OF CR 8/WILLIAMSBURG RD										
PROJ ID :	422420-Clinch	MPO:	Not Urban	PRIORITY CODE:						
COUNTY :	2.70	TIP #:		DOT DIST:	03/16/2007					
LENGTH (MI)		MODEL YR :		CONG. DIST:	MGMT ROW DATE :					
PROJ NO.:	EDS00-0441-00(047)	TYPE WORK:	Widening	BIKE:	BASELINE LET DATE:					
PROJ MGR:	Hailcock, Mike	CONCEPT:	ADD 4RMED 44)	MEASURE:	SCHED LET DATE :					
AOHD Initials:	MAH	PROG TYPE:	Reconstruction/Rehabilitation	NEEDS SCORE:	WHO LETS? :					
OFFICE:	Program Delivery	Prov. for ITS:	N	BRIDGE SUFF:	ON HOLD					
CONSULTANT:	GDOT	BOND PROJ.:	GRIP FEDERAL	LET WITH:						
BASE START	BASE FINISH	LATE START	LATE FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS		
6/1/2010				Concept Development	7/24/2002	10/25/2002	100	Activity	Approved	Proposed
				Concept Meeting	8/6/2002	8/6/2002	100	PE	1995	1995
				PMI Submit Concept Report	8/20/2002	8/22/2002	100	ROW	2008	3,042,628.34
				Receive Preconstruction Concept Approval	8/22/2002	10/1/2002	100	CST	LR	EDS AUTHORIZED
				Management Concept Approval Complete	10/9/2002	10/25/2002	100			3/28/1995
				Value Engineering Study	9/23/2009		85			7/9/2007
				Public Information Open House Held	3/18/2002	3/18/2002	100			
				Environmental Approval	6/1/2001	12/1/2004	100			
				Pub Hear Held/Comm Resp (EA/FONS1, GIEPA)	3/11/2004	3/11/2004	100			
				Mapping	1/2/2002	8/31/2002	100			
				Field Surveys/SDE	1/2/2002	8/31/2002	100			
				Preliminary Bridge Design	10/28/2002	2/1/2005	100			
				R/OW Plans Preparation	3/3/2004	3/7/2004	100			
				Preliminary Bridge Design	8/20/2002	3/20/2003	100			
				Underground Storage Tanks						
				R/OW Permit Obtainment	2/1/2005	2/1/2005	100	PE Cost Est Amnt.		
				PFPR Inspection	2/1/2005	1/18/2006	100	ROW Cost Est Amnt.		
				R/W Plans Preparation	4/12/2006	4/17/2006	100	CST Cost Est Amnt.		
				R/OW Plans Final Approval	11/14/2005	12/1/2005	100			
				L & D Approval	7/9/2007	7/9/2007	100			
				R/W Authorization						
				Stake R/W						
				Soil Survey	6/7/2004	6/7/2004	100			
				Bridge Foundation Investigation	2/1/2005	3/31/2006	100			
				Final Design	2/1/2005		63			
				Final Bridge Plans Preparation	2/1/2005		95			
				FFPR Inspection	6/15/2010		0			
				Submit FFPR Responses (OES)	6/29/2010	7/12/2010	0			
							0			
PPD:	BOND PAR & CONCEPT TOGETHER BAD WETLAND PROBLEMS NEED CONCEPT 10/30/96.									
Bridge:	Tunkey (STS ONLY) 5/2/01									
Design:	Fago - Contract expired - ON HOLD									
EIS:	EA/FONS1 12-1-04/R2-15-06 & 6.26.07 SHELVED JOHN (8-7-07)									
LGPA:	NOTIFICATION LETTER SENT TO CLINCH 1-25-07.									
Programming:	1625-6-04									
ROW:	SUB TO OMR 4-24-02 (2 SITES)									
USF:	OCU SUE compl 11/2/04 - TBE Group NEED 2ND SUB 03/05									
Utility:	REC/STREHAB (WIDENING): C-M/S/D/KMM/EARTH/TECH), TURNKEY									
EMG:	RECEIVED BY: (WIDENING): C-M/S/D/KMM/EARTH/TECH), TURNKEY									
Prel. Parcel CT:	59	Total Parcel in ROW System:	56	Cond. Filed:	0	Acquired by:	DOT			
Under Review:	0	Options - Pending:	0	Relocations:	8	Acquisition Mgr.:	Bradford, Kim			
Released:	0	Condemnations- Pend:	0	Acquired:	0	R/W Cert Date:				
						DEEDS CT:	0			